#### BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

LeRoy KoppendrayerChairMarshall JohnsonCommissionerKen NickolaiCommissionerPhyllis A. RehaCommissionerGregory ScottCommissioner

In the Matter of the Application for a Certificate of Need for a High Voltage Transmission Line by Great River Energy and Wright-Hennepin Cooperative Electric Association

ISSUE DATE: October 9, 2003

DOCKET NO. ET-2/CN-02-536

ORDER GRANTING CERTIFICATE OF

**NEED** 

# **PROCEDURAL HISTORY**

# I. Initial Proceedings

On November 14, 2002, Great River Energy (GRE) and Wright-Hennepin Cooperative Electric Association (WHCEA)(collectively Applicants) filed a Certificate of Need (CON) Application and Draft Environmental Report requesting permission to construct a 115-kilovolt (kV) large high voltage transmission line (LHVTL) in Plymouth and Maple Grove (the Project). Pursuant to Minn. Stat. § 216B.2421, Subd. 2(3) the transmission line is a large energy facility.

On January 27, 2003, the Commission issued Orders finding the application substantially complete and referring the application to the Office of Administrative Hearings for contested case proceedings. The Case was assigned to Administrative Law (ALJ) Judge Allan W. Klein.

On February 5, 2003, GRE and WHCEA filed a Supplement to their Application for a Certificate of Need and Draft Environmental Report. The Supplement addressed the December 2, 2002 comments of the Minnesota Department of Commerce (DOC) and the Environmental Quality Board (EQB).

On May 29, 2003, a public hearing was held in Plymouth. Approximately 35 persons attended the public hearing. A few of the commentators raised questions about the need for the facility, but most of the comments addressed the possible route for the LHVTL (which will be addressed at a later time by the EQB).

On June 4, 2003, an evidentiary hearing was held in St. Paul.

On August 1, 2003, ALJ Allan W. Klein submitted Findings of Fact, Conclusions of Law and Recommendations (the ALJ's Report). The ALJ recommended that the Applicants be granted a Certificate of Need for the proposed LHVTL. <sup>1</sup>

No parties filed exceptions to the ALJ's Report. Therefore, the record closed on August 16, 2003, the last day on which exceptions could have been filed.<sup>2</sup>

The matter came before the Commission on September 18, 2003.

# II. The Parties and their Representatives

GRE and WHCEA were represented by Michael Bradley, Moss & Barnett, 4800 Wells Fargo Center, Minnesota 55402-4129.

The DOC was represented by Julia Anderson, Assistant Attorney General, 525 Park Street, Suite 500, St. Paul, Minnesota 55103.

The EQB staff was represented by Alan Mitchell, 658 Cedar Street, 300 Centennial Office Building, St. Paul, Minnesota 55155.

# FINDINGS AND CONCLUSIONS

# I. Background

GRE is a Minnesota not-for-profit cooperative corporation created when Cooperative Power Association and United Power Association formed a joint operating company to provide generation and transmission services to their 29 Cooperative members. WHCEA is one of the 29 Cooperative members. WHCEA is the distribution cooperative serving much of the area proposed to be served by the proposed transmission line. WHCEA provides electricity and related services to approximately 34,000 residential, commercial, and industrial customers in Minnesota. Approximately 10,503 residential, commercial and industrial customers in the Plymouth-Maple Grove area would benefit from the proposed line.

GRE's and WHCEA's application is for a CON for a 115 kV LHVTL to provide energy and capacity to the Plymouth-Maple Grove service area. The LHVTL would connect to the Xcel Energy Elm Creek Substation at its north end, and would provide energy and capacity to the Arbor Lake, Cedar Island, Bass Lake, and Plymouth substations operated by WHCEA. It would also

<sup>&</sup>lt;sup>1</sup> The issue considered by the ALJ was whether there was a need for the proposed 115 kV LHVTL. The ALJ did not consider the issue of the appropriate route for the LHTVL. That will be determined by the Minnesota Environmental Quality Board in a separate proceeding.

<sup>&</sup>lt;sup>2</sup> Minn. Stat. § 14.61, subd.2; Minn. Rules 7829.2700, subp.1.

provide energy and capacity to the Hennepin substation operated by Connexus, another cooperative member of GRE. The 115 kV LHVTL would connect to the Xcel Energy substation at Parkers Lake on the south end of the line.

# II. The Legal Standard

#### A. The Statute

The certificate of need statute directs the Commission to "adopt assessment of need criteria to be used in the determination of need for large energy facilities pursuant to this section," listing eight factors the Commission is to incorporate into its evaluation criteria.<sup>3</sup> The statute also prohibits the Commission from granting any certificate of need unless the applicant demonstrates that the need for electricity cannot be met more cost-effectively through energy conservation and load-management measures.<sup>4</sup>

It also prohibits the Commission from granting a certificate of need for any large energy facility that transmits electric power generated by means of a nonrenewable energy source, unless the applicant demonstrates that it has explored using renewable resources and that the total costs of the project it proposes, including environmental costs, are lower than the cost of using renewables.<sup>5</sup>

#### B. The Rules

To comply with its statutory obligation to establish criteria for assessing need, the Commission has adopted the certificate of need rules, Minnesota Rules Chapter 7849. Those rules are detailed, but in brief, they require the Commission to issue a certificate of need when the applicant demonstrates four things:

- (A) the probable result of denial would be an adverse effect upon the future adequacy, reliability, or efficiency of energy supply to the applicant, to the applicant's customers, or to the people of Minnesota and neighboring states;
- (B) a more reasonable and prudent alternative to the proposed facility has not been demonstrated by a preponderance of the evidence on the record;
- (C) by a preponderance of the evidence on the record, the proposed facility, or a suitable modification of the facility, will provide benefits to society in a manner compatible with protecting the natural and socioeconomic environments, including human health; and

<sup>&</sup>lt;sup>3</sup> Minn. Stat. § 216B.243, subd. 1.

<sup>&</sup>lt;sup>4</sup> Minn. Stat. § 216B.243, subd. 3.

<sup>&</sup>lt;sup>5</sup> Minn. Stat. § 216B.243, subd. 3a.

(D) the record does not demonstrate that the design, construction, or operation of the proposed facility, or a suitable modification of the facility, will fail to comply with relevant policies, rules, and regulations of other state and federal agencies and local governments.

Minn. Rules 7849.0120.

The rules also set forth factors to consider in evaluating whether the applicant has met the requirements of criteria A, B, and C.

# III. The ALJ's Findings on Need Criteria

The Administrative Law Judge examined the application in light of the certificate of need criteria and found that the Applicants had demonstrated a need for the proposed facility. The ALJ's findings are summarized below.

A. Would the Probable Result of a Denial of the CON be an Adverse Effect Upon the Future Adequacy, Reliability and Efficiency of Energy Supply to GRE's and WHCEA's Customers, or to the People of Minnesota and Neighboring States?

The ALJ concluded that denial of the CON would have an adverse effect upon the future adequacy, reliability and efficiency of energy supply to WHCEA customers in the Plymouth-Maple Grove service area.

The ALJ based his conclusions and findings on the applicants' forecast accuracy, effects of conservation programs and promotional practices, ability of current facilities and planned facilities not requiring certificates of need to meet future demand need, and the effect of the facility in making efficient use of resources. These findings will be summarized below.

- The ALJ did not make a finding on the accuracy of supporting forecasts because there was no dispute between the parties (DOC and Applicant) that there is an actual need for the proposed facility.
- The ALJ found that the effect of conservation programs would be unlikely to reduce demand significantly below the levels already experienced.
- Because the parties agreed that the need for the LHVTL was not caused by the
  demand-side management programs of WHCEA, the ALJ determined that there
  was no need for a finding or recommendation on whether WHCEA's demand-side
  management programs promote energy use.
- The capacity of the existing transmission system is insufficient to meet the anticipated future demand without overloading the existing transmission lines, which is forecasted by the Applicants to occur as early as the summer of 2004.

• The ALJ found that the proposed facility would remove a barrier to growth. To the extent that the proposed line permits development in the Plymouth-Maple Grove area to continue it permits a more efficient use of existing infrastructure than would any alternative that displaced development to more remote regions. Further, the proposed line incurs lower line losses than any alternative, therefore using existing generation facilities in the most efficient manner.

ALJ's Findings of Fact 14-31.

# B. Have Renewable Alternatives to the Proposed Project been Considered?

The ALJ accepted the testimony by the parties regarding renewable resources. The ALJ found that the parties explored this possibility and came to the following conclusions:

- Wind would require more land than was available in the Plymouth-Maple Grove area so that transmission facilities would still be needed to get the output of any wind source to the load.
- Since hydropower is also not available in this area, transmission facilities would be necessary to get the output of any hydropower source to the load.
- The amount of land necessary for solar panels and associated backup systems would not be available in this area.
- There is no geothermal site available in this area.
- It is unlikely that biomass facilities would be allowed in the residential areas of Plymouth or Maple Grove.

ALJ's Findings of Fact 32-37.

# C. Has a More Reasonable and Prudent Alternative to the Facility Been Demonstrated by a Preponderance of the Evidence on the Record?

The ALJ concluded that considering the size, type, timing, costs, natural and socioeconimic environmental effects, and reliability, a more reasonable and prudent alternative to the proposed LHVTL has not been demonstrated by a preponderance of the evidence on the record. The ALJ's findings are summarized below.

The Applicants proposed five alternatives: 1) the proposed 115 kV LHVTL line, 2) upgrading the existing 69 kV transmission system, 3) splitting the existing 69 kV system into stand-alone east and west systems, 4) adding an additional 69 kV source, and 5) adding new generation facilities in the Plymouth-Maple Grove area. The applicants also considered the possibility of putting the lines underground. The cost for putting the lines underground would be two to three times higher than the Applicants' proposed above- ground 115 kV alternative.

For the 69 kV line options, the appropriate voltage support cannot be maintained with line improvements alone due to the lengths and anticipated loads, making other improvements necessary. This is not the case with the proposed 115 kV line. The 115 kV line provides improved reliability over the 69 kV options. The increased reliability is due to higher power poles, fewer poles, increased phase spacing and longer line insulators. Further, the eastern WHCEA distribution substation reliability is improved with the 115 kV option.

New generation would cost approximately eight times as much as the proposed project. Further, it would be less desirable because of noise and cost and would require as much as 30 acres of land.

The proposed project will likely be built using existing rights-of-way, with only 4.25 miles of new right of way required. The principal environmental impact would be during construction, and would be mitigated using best management practices. Further, the transmission corridor in the proposed project would occur in more commercial/industrial development areas than other alternatives and would be along an Interstate Highway corridor.

ALJ's Findings of Fact 39-51.

# D. Are there Benefits of the Proposed Facility to Society in a Manner Compatible with Protecting the Natural and Socioeconomic Environments, including Human Health?

The ALJ concluded that the proposed LHVTL will provide benefits to society in a manner compatible with protecting the natural and socioeconomic environments, including human health.

When considering the relationship of the proposed facility to overall state energy and capacity needs, the ALJ found that the proposed project would enhance transmission reliability because there would be no need for GRE to shed load (beginning 2005) to prevent damage to the transmission system. The ALJ found that if no facility were built, demand would clearly exceed line capacity resulting in the need to shed load. Doing so would result in service interruptions that would likely have an adverse effect on the local economy.

The ALJ found that the primary benefit of the proposed facility is the increased strength and reliability of WHCEA's system. The general development of this portion of the metropolitan area is desirable because it reduces urban sprawl by allowing growth without the need to expand further into surrounding communities. Removing barriers to such development through an enhanced electrical system is another incidental benefit to society.

ALJ's Findings of Fact 63-73

# E. Will there be Compliance with Policies, Rules and Regulations?

The ALJ found that there was no indication in the record that the design, construction and operation of the project will fail to comply with relevant policies, rules and regulations of other state and federal agencies and local governments. ALJ's Finding of Fact 75.

#### IV. Commission Action

The Commission has examined the full record in this case, and its reading of the evidence leads to the same findings and conclusion reached by the Administrative Law Judge. The Commission concurs in and adopts the Administrative Law Judge's findings and conclusions, which are attached and incorporated herein.

#### **ORDER**

- 1. The Commission accepts and adopts the Findings of Fact, Conclusions of Law and Recommendation of the Administrative Law Judge, which are attached and incorporated herein.
- 2. The Commission grants the certificate of need for the construction of the proposed 115-kilovolt transmission line, with endpoints at the Xcel Energy Elm Creek Substation and Parkers Lake Substation.
- 3. This Order shall become effective immediately.

BY ORDER OF THE COMMISSION

Burl W. Haar Executive Secretary

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